

In the Claims:

1. (Currently Amended) An electrical energy storage device, which comprises:
 - a) a container having a surrounding side wall providing an opening leading into the container;
 - b) an electrode assembly comprising an anode and a cathode in [a] electrochemical association with each other inside the container;
 - c) a lid having spaced apart upper and lower surfaces joined by a peripheral edge and secured to the open end of the container to provide a casing housing the electrode assembly, wherein the lid supports ~~has at least a unitary~~ terminal ferrule comprising a sidewall extending to a lower ferrule surface spaced below the lower lid surface and wherein one of the anode and the cathode is connected to the casing as its terminal ~~extending below the lid lower surface with an inner surface of the terminal ferrule characterized by a roughened texture;~~
 - d) a terminal lead extending through the terminal ferrule and having a length providing a first end ~~position~~ spaced above the upper lid surface ~~of the lid~~ and a second end connected to the other one of the anode and the cathode not connected to the casing so that the terminal lead is of an opposite polarity as the casing electrodes, wherein a sealing material seals between the terminal lead and an inner surface of the terminal ferrule sidewall is sealed in the terminal ferrule in an insulated relationship therewith;

- e) an insulator encasing ~~the terminal ferrule and at least a portion of the length of the terminal lead disposed inside the casing~~ from a lower surface of the sealing material to a location spaced below the lower ferrule surface a sufficient distance to segregate the opposite polarity casing including the lid and terminal ferrule from the terminal lead; and
- f) an electrolyte provided in the casing to activate the anode and cathode electrodes.

2. (Original) The electrical energy storage device of claim 1 wherein the insulator is of a thermoplastic fluoro-polymer material.

3. (Currently Amended) The electrical energy storage device of claim 1 wherein an outer surface of the terminal ferrule is provided with a series of annular rings encased by the insulator.

4. (Original) The electrical energy storage device of claim 1 wherein the inner surface of the terminal ferrule has a machined roughened texture.

5. (Currently Amended) The electrical energy storage device of claim [1] 3 including an annular ring surrounding the insulator encasing the terminal ferrule so that the insulator is in contact with both the inner and outer surfaces of the terminal ferrule.

6. (Original) The electrical energy storage device of claim 1 wherein the lid has a unitary fill port extending below the lid lower surface.

7. (Original) The electrical energy storage device of claim 1 wherein the lid is of a conductive material selected from the group consisting of stainless steel, titanium, nickel and aluminum.

8. (Original) The electrical energy storage device of claim 1 as either an electrochemical cell or a capacitor.

9. (Currently Amended) A lid header assembly for closing an open end of a casing for an electrochemical energy storage device, the header assembly comprising a lid supporting having a terminal ferrule supporting a terminal lead extending therethrough, wherein the terminal lead has a length providing a first end positioned spaced above the upper surface of the lid and a second end extending below the lid lower surface, and wherein the terminal lead is sealed in an insulated relationship in the terminal ferrule by a sealing material contacting the terminal lead and an inner surface of the terminal ferrule with an insulator encasing the terminal ferrule and at least a portion of the length of the terminal lead extending below the lid lower surface, the improvement in the lid header assembly comprising:

the lid comprising spaced apart upper and lower surfaces joined by a peripheral edge, wherein the terminal ferrule is a unitary portion of the lid extending extends below the lid lower surface with an inner surface of the terminal ferrule

characterized by a roughened texture and wherein an insulator material encases the terminal lead from a lower surface of the sealing material to a location spaced below the lower ferrule surface a sufficient distance to segregate the terminal lead from the lid including the terminal ferrule when the second end of the terminal lead is electrically connected to an electrode of an opposite polarity as the lid.

10. (Currently Amended) The ~~lid~~ header assembly of claim 9 wherein the insulator material is of a thermoplastic fluoropolymer material.

11. (Currently Amended) The ~~lid~~ header assembly of claim 9 wherein an outer surface of the terminal ferrule is provided with a series of annular rings encased by the insulator material.

12. (Currently Amended) The ~~lid~~ header assembly of claim 9 wherein the inner surface of the terminal ferrule has a machined roughened texture.

13. (Currently Amended) The ~~lid~~ header assembly of claim 9 including an annular ring surrounding the insulator material encasing the terminal ferrule.

14. (Currently Amended) An implantable medical device, which comprises:

- a) a device container;
- b) a control circuitry; and
- c) an electrical energy storage device, wherein the control circuitry and the electrical energy storage device are housed in the device container, the electrical energy storage device comprising:
 - i) a container having a surrounding side wall providing an opening leading into the container;
 - ii) an electrode assembly comprising an anode and a cathode in electrochemical association with each other disposed inside the container;
 - iii) a lid having spaced apart upper and lower surfaces joined by a peripheral edge and secured to the open end of the container to provide a casing housing the electrode assembly, wherein the lid has supports at least a ~~unitary~~ terminal ferrule extending below the lid lower surface and wherein one of the anode and cathode is connected to the casing as its terminal with an inner surface of the terminal ferrule characterized by a roughened texture;
 - iv) a terminal lead extending through the terminal ferrule and having a length providing a first end ~~positioned~~ spaced above the upper surface of the lid and a second end connected to the other one of the anode and the cathode not connected to the casing so that the terminal lead is of an opposite polarity as the casing electrodes,

wherein a sealing material seals between the terminal lead and an inner surface of the terminal ferrule sidewall ~~is sealed in the terminal ferrule in an insulated relationship therewith;~~

- v) an insulator encasing ~~the terminal ferrule and at least a portion of the length of the terminal lead disposed inside the casing~~ from a lower surface of the sealing material to a location along the length of terminal lead not directly opposed by the terminal ferrule and spaced below the lower ferrule surface a sufficient distance to segregate the opposite polarity casing including the lid and terminal ferrule from the terminal lead; and
- vi) an electrolyte provided in the casing to activate the anode and cathode electrodes.

15. to 19. (Cancelled)

20. (Withdrawn and Currently Amended) A method for providing an electrical energy storage device, comprising the step of:

- a) providing a container having a surrounding side wall with an opening leading into the container;
- b) disposing an electrode assembly comprising an anode and a cathode in electrochemical association with each other inside the container;
- c) machining a blank to provide a lid having spaced apart upper and lower surfaces joined by a peripheral edge and at least a unitary terminal ferrule comprising a

sidewall extending to a lower ferrule surface spaced below the lower lid surface extending below the lid lower surface, wherein an outer surface of the terminal ferrule is in a normal orientation with the lid lower surface;

- d) sealing a terminal lead extending through the terminal ferrule with a sealing material contacting an inner surface of the terminal ferrule sidewall and the terminal lead, the terminal ferrule lead having a length providing a first end spaced above the upper surface of the lid and a second end extending below the lid lower surface, wherein the terminal lead is sealed in the terminal ferrule in an insulated relationship therewith;
- e) providing an insulator encasing ~~the terminal ferrule and at least a portion of the length of~~ at least a portion of the terminal lead extending below the a lower lid surface of the sealing material;
- f) connecting ~~the portion of the~~ second end of the terminal lead ~~extending below the lid lower surface to~~ one of the anode and cathode electrodes;
- g) securing the lid to the container to close the opening leading therein and thereby providing a casing for the electrical energy storage device, wherein the other of the anode and cathode not connected to the terminal lead is connected to the casing as its terminal with the insulating material encasing the terminal lead extending from the lower surface of the sealing material to a location spaced below the lower ferrule surface a sufficient distance to segregate the opposite

polarity casing including the lid and terminal ferrule from the terminal lead; and

- h) activating the anode and cathode electrodes with an electrolyte provided in the casing.
21. (Withdrawn) The method of claim 20 including providing the insulator of a thermoplastic fluoro-polymer material.
22. (Withdrawn) The method of claim 20 including providing an outer surface of the terminal ferrule with a series of annular rings encased by the insulator.
23. (Withdrawn) The method of claim 20 including machining the terminal ferrule having an inner surface with a machined roughened texture.
24. (Withdrawn and Currently Amended) The method of ~~claims 20~~ claim 22 including providing an annular ring surrounding the insulator encasing the terminal ferrule.
25. (Withdrawn) The method of claim 20 including machining the blank having a unitary fill port extending below the lid lower surface.
26. (New) The electrochemical energy storage device of claim 1 wherein the lid and terminal ferrule are unitary.
27. (New) The header assembly of claim 9 wherein the lid and terminal ferrule are unitary.

28. (New) The implantable medical device of claim 14 wherein the lid and terminal ferrule are unitary.
29. (New) The electrical energy storage device of claim 1 of a chemistry selected from the group consisting of a lithium/iodine cell, a lithium thionylchloride cell, a lithium/silver vanadium oxide cell, a lithium/carbon monofluoride cell, a lithium/manganese dioxide cell, and a secondary cell containing lithium cobalt oxide.
30. (New) An electrochemical cell, which comprises:
- a) a container having a surrounding side wall providing an opening leading into the container;
 - b) an electrode assembly comprising a lithium anode and a cathode comprising at least one of silver vanadium oxide and manganese dioxide, the anode and cathode being in electrochemical association with each other inside the container;
 - c) a lid having spaced apart upper and lower surfaces joined by a peripheral edge and secured to the open end of the container to provide a casing housing the electrode assembly, wherein the lid supports a terminal ferrule comprising a sidewall extending to a lower ferrule surface spaced below the lower lid surface and wherein one of the anode and the cathode is connected to the casing as its terminal;
 - d) a terminal lead extending through the terminal ferrule and having a length providing a first end spaced above the upper lid surface and a second end connected to the other one of the anode and the cathode not connected to

the casing so that the terminal lead is of an opposite polarity as the casing, wherein a sealing material seals between the terminal lead and an inner surface of the terminal ferrule sidewall;

- e) an insulator encasing the terminal lead from a lower surface of the sealing material to a location spaced below the lower ferrule surface a sufficient distance to segregate the opposite polarity casing including the lid and terminal ferrule from the terminal lead; and
- f) an electrolyte provided in the casing to activate the anode and cathode.